

Amendments to the Specification:

Page 1, before line 3, the paragraph beginning with "TECHNICAL FIELD OF THE INVENTION", insert the following title and paragraph:

PRIORITY CLAIM

a1 This is a U.S. national stage of application under 35 U.S.C. §371 of international stage application No. PCT/FI99/00969, filed on November 24, 1999. Priority is claimed under 35 U.S.C. §119(a) and 35 U.S.C. §365(b) from Finnish Patent Application No. 982556, which was filed on November 25, 1998; and from which priority was properly claimed in the aforementioned international stage application.

Page 1, line 6, the paragraph beginning with "The invention is", please replace the paragraph with the following amended paragraph:

a2 The invention is directed to a method for location management in cellular telecommunication system. ~~[More precisely, the invention is directed to a method as described in the preamble of the independent method claims.]~~

Page 2, line 22, the paragraph beginning with "Further, the mobile", please replace the paragraph with the following amended paragraph:

a3 Further, the mobile station does not necessarily know the location area and the routing area of the cells in the active set, if the network does not indicate the system information of each cell at the time[₅] when the cell is added to the active set. This creates a problem ~~[in such a situation,]~~ when a mobile station has active connections to one core network element, e.g. MSC, and none to another core network elements such as the SGSN, in which case the packet data entities are in idle state. In idle state, the MS should perform location updates regularly, or when the MS moves into another routing or location area. However, when the mobile station does not know the location and routing areas of the cells, the determination of whether a location update should be performed poses a further problem.

Page 3, lines 10-16, delete paragraph.

Page 9, line 27, the paragraph beginning with "According to an", please replace the paragraph with the following amended paragraph:

94 According to an advantageous embodiment of the invention, the updating of the serving cell set proceeds as follows in a situation, in which two radio network controllers participate in the macro diversity communication. After the RNC relocation signaling [~~between~~] for transferring the serving RNC status from a first RNC to a second RNC is finished, the second RNC sends an indication to the MS, indicating that the second RNC is now the serving RNC. As a response to receiving the indication, the mobile station examines the active set and for each cell in the active set, changes the information indicating whether the cell is in the serving cell set or not. If a cell is indicated as being a part of the serving cell set, the indication is changed to indicate that the cell is outside the serving cell set. If a cell is indicated as being outside the serving cell set, the indication is changed to indicate that the cell is in the serving cell set. In other words, those cells which are under control of the old serving RNC are marked as being outside the serving cell set and cells under control of the new serving RNC are marked as being in the serving cell set.

Page 14, line 30, the paragraph beginning with "The name of", please replace the paragraph with the following amended paragraph:

95 The name of a given functional entity, such as the radio network controller, is often different in the context of different cellular telecommunication systems. For example, in the GSM system the functional entity corresponding to a radio network (RNC) is the base station controller (BSC). Therefore, the term radio network controller in this specification and the claims is intended to cover all corresponding functional entities regardless of the term used for the entity in the particular cellular telecommunication system. Further, the various message names such as the ACTIVE SET UPDATE message name are intended to be examples only, and the invention is not limited to using the message names recited in this specification.